

Notice of Allowability

Application No.

10/627,593

Applicant(s)

ZHU ET AL.

Examiner

Art Unit

Lin Liu

2145

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to 06/12/2007.
2. The allowed claim(s) is/are 1 and 16.
3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some* c) None of the:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 1) hereto or 2) to Paper No./Mail Date _____.
(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of
 Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. Information Disclosure Statements (PTO/SB/08),
 Paper No./Mail Date _____
4. Examiner's Comment Regarding Requirement for Deposit
 of Biological Material
5. Notice of Informal Patent Application
6. Interview Summary (PTO-413),
 Paper No./Mail Date _____
7. Examiner's Amendment/Comment
8. Examiner's Statement of Reasons for Allowance
9. Other _____


JASON CARDONE
SUPERVISORY PATENT EXAMINER

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with O'Hagan, Timothy on August 15, 2007.
3. The application has been amended as follows:

Claim 1. (Currently Amended) A video mail server comprising:

 a video call signaling module coupled to an internet protocol network via an internet protocol services module for:

 establishing a first internet protocol channel with a caller remote internet video device to support a recording session over the internet protocol network; and

 establishing a second internet protocol channel with a user remote internet video device to support a playback session over the internet protocol network;

 a media interface coupled to the internet protocol network via the internet protocol services module and comprising:

 a recording module for obtaining a recording sequence of compressed images representing motion video from the caller remote internet video device and storing a video mail file representing the recording sequence of

compressed images in a storage; each compressed image frame within the video mail file being one of:

an independent frame from which a video image frame can be recovered utilizing only the independent frame; and

a dependent frame from which the video image frame can only be recovered utilizing both the dependent frame and an independent frame preceding the dependent frame in the sequence;

a play back module for;

retrieving the recording sequence of compressed images from storage and transferring such recording sequence of compressed images as a playback sequence of compressed images to the user remote internet video device;.

receiving a lost frame message from the user remote internet, video device when the user remote internet video device detects loss of a frame within the playback sequence of compressed images; and

substituting a lost frame correction frame an independent frame from a video codec encoder module into the playback sequence of compressed images in response to receiving such lost frame message;

a video codec comprising a decoder module and an encoder module;

the decoder module i) receiving the recording sequence of compressed images from the storage; and ii) decoding the recording sequence of compressed images to generate motion video images;

the encoder module encodes a motion video image, as a lost frame correction frame; and

a delay buffer for delaying the playback sequence of compressed images for a period of time such that each frame within the playback sequence of compressed images is queued for transfer to the user remote Internet device at a time when a corresponding lost frame correction frame independent frame is available from the encoder module for substitution in the playback sequence of compressed images.

Claims 2-15 Cancelled.

Claim 16. (Currently Amended) A method of recording and playing back video mail, the method comprising:

establishing a first internet protocol channel with a caller remote Internet video device to support a recording session over the internet protocol network;

establishing a second internet protocol channel with a user remote Internet video device to support a playback session over the internet protocol network;

obtaining a recording sequence of compressed images from the caller remote internet video device;

storing a video mail file representing the recording sequence of compressed images in a storage; each compressed image frame within the video mail file being one of:

an independent frame from which an image frame can be recovered utilizing only the independent frame; and

a dependent frame from which the image frame can only be recovered utilizing both the dependent frame and an independent frame preceding the dependent frame in the sequence;

retrieving the recording sequence of compressed images from storage and transferring such recording sequence of compressed images as a playback sequence of compressed images to the user remote internet video device;

simultaneously decoding the recording sequence of compressed images to generate motion video images and encoding each motion video image as a lost frame correction frame;

receiving a lost frame message from the user remote internet video device when the user remote internet video device detects loss of a frame within the playback sequence of compressed images; and

substituting a lost frame correction frame an independent frame from a video codec encoder module into the playback sequence of compressed images in response to receiving such lost frame message; and

wherein the playback sequence of compressed images is delayed for a period of time such that each frame within the playback sequence of compressed images is queued for transfer to the user remote internet device at a time when a corresponding ~~lost frame~~ correction frame independent frame is available for substitution in the playback sequence of compressed, images.

Claims 17–30 Cancelled.

Allowable Subject Matter

4. Claims 1 and 16 allowed.
5. The following is an examiner's statement of reasons for allowance:

The claimed invention is directed toward a video mail server comprising a play back module at the server, which in response to receiving a lost frame message from the user remote internet video device, substitutes an independent frame from a video codec encoder module into the playback sequence of compressed images that is being streamed to the client. The prior art of record taking singly or in combination does not teach or suggest a combination of method steps as claimed that is used to correct the video mail file due to lost frames by substituting an independent frame from a video codec encoder module into the playback sequence of compressed images that is being streamed to the client. The closest prior art of record (i.e Walter (Publication no.: US 2001/0052019), Belknap (publication no.: US 2003/0002854 A1) and Campbell (publication no.: US 2003/0140159 A1)) does not teach or suggest this feature. Based on this reasoning, claim 16 is allowable over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lin Liu whose telephone number is (571) 270-1447. The examiner can normally be reached on Monday - Friday, 8:00am - 5:30pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service

Representative or access to the automated information system, call 800-786-

9199 (IN USA OR CANADA) or 571-272-1000.

L. Liu
08/15/2007



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